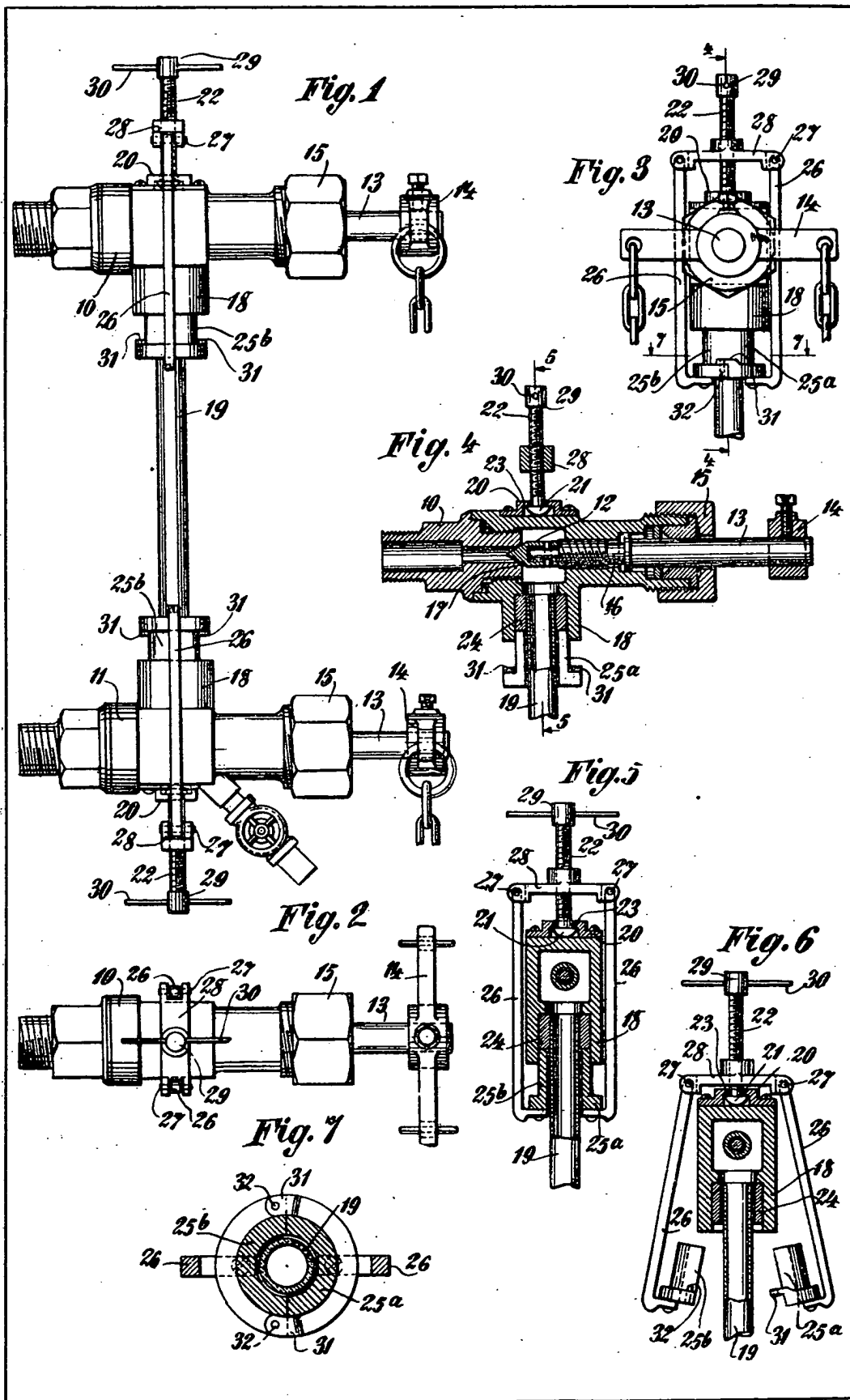


377.832 COMPLETE SPECIFICATION

1 SHEET



[This Drawing is a reproduction of the Original on a reduced scale.]

Best Available Copy

Application Date: Sept. 8, 1931. No. 25,231/31.

Complete Accepted: Aug. 4, 1932.

COMPLETE SPECIFICATION.



Improvements in Fittings for Gauge Glass Connectors.

I, GEORGE ERNST, a Citizen of the United States of America, of 44, Oakland Terrace, Newark, County of Essex, State of New Jersey, United States of America, Engineer, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

10 It has been known to provide liquid level gauges having glasses, heads for the glasses, gaskets and glands for compressing the gaskets to seal the glass. The glands were of one piece form and
15 tightened by a screw cap thus creating a torsion on the glass.

By the present invention, the gland is split and the parts of the gland actuated by a unitary means acting on the respective gland parts in an axial direction, avoiding the torsion and breakage of the glass. The unitary means may include spaced elements swingably or pivotally mounted as at the said axis, and a
25 balanced operating means such as a cross-head, and manual or screw means may actuate the elements. The swingable means may operate with different glands. The gland parts may be releasably inter-
30 locked. The invention has special advantage for high pressure boilers as the glass is under great strain due to the high temperature and pressure.

In the drawings, showing one possible
35 form of the invention,

Figure 1 is a view in side elevation of the invention.

Figure 2 is a plan view.

Figure 3 is a front elevation of a part.

40 Figure 4 is a sectional view on line 4—4 of Fig. 3.

Figure 5 is a sectional view on line 5—5 of Fig. 4.

45 Figure 6 showing the device in open position.

Figure 7 is a sectional view on line 7—7 of Fig. 3.

The invention may be illustrated in connection with the upper and lower
50 bodies 10 and 11, which may have cut off valves 12 for seats 17, stems 13 for the valves connected at 16, operated at 14 and having conventional closure nuts 15.

[Price 1/-]

Each head may have a boss 18 for receiving an end of the gauge glass 19. 55 On a side of each body opposite to the boss is a socket 20 for a pivotal bearing head 21 of a rotatable screw 22 extending through a hole 23. The screw is preferably alined with the boss 18. For com- 60 pressing the flexible ring gasket 24, a split gland is used, consisting of two parts 25a and 25b of semi cylindrical form adapted to loosely embrace 19. These parts are separately connected to spaced 65 elements 26 pivoted at 27 on a cross head 28 through which the screw 22 is threaded, forming a clamp. The part 25a has end ears 31 for pins 32 for releas- 70 ably and loosely interlocking part 25b. The screw 22 may be operated by members 29, 30.

In operation the glass and gaskets are set into the bosses 18, then the split gland parts are swung together and interlocked. 75 Upon turning the screws 22, the gland parts enter the bosses and compress the gaskets. The forces on the gland parts are centrally balanced, and each gland part moves to its proper degree causing a uniform accommodating compression without strain or torsion on the glass. It will be noted that the elements 26 may be regarded as part of a structure having a common pivotal mounting at 21. 85

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:— 90

1. A device having a gauge glass, a head for receiving an end thereof and communicating with said glass, and a gasket means for sealing the glass with the head, characterized by a split gland 95 surrounding the glass and adapted to bear on said gasket means, and spaced elements mounted to act as a unit on the respective split gland parts to compress the gasket means. 100

2. A device as in claim 1 characterized by a single operating means for actuating said elements.

3. A device as in claim 1, characterized in that the spaced elements are swingably 105 mounted for bearing on the split gland

without torsional strain on the glass.

4. A device according to claim 3 wherein the elements are carried by a member pivotally mounted in a point
5 lying in the axial line of the glass.

5. A device according to claim 1 wherein the split gland portions have interlocking means therebetween.

6. A device according to claim 2 characterized in that the operating means includes a cross head connected to said elements, and manual power means acting between the cross head and the gauge head.

7. A device including a gauge glass, a head for receiving an end thereof and communicating with the glass, a gasket for sealing the glass with the head, and a gland for the gasket, characterized by swingable means mounted on the head and adapted to act on the gland to compress the gasket.

Dated this 8th day of September, 1931.

For the Applicant,

FRANK B. DEHN & Co.,
Chartered Patent Agents,
Kingsway House, 103, Kingsway, London,
W.C. 2.

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☐ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☒ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.

